package socket.test1;

import java.io.\*;

import java.net.\*;

public class ImageClient {

public static void main(String[] args) {

String host = "localhost";

String imageName = "Koala-wrong.png";

String outputDir = "socket/test1/";

try {

Socket socket = new Socket(host, 8008);

// read data from the server from this

BufferedInputStream in = new BufferedInputStream(

socket.getInputStream());

// write data to the server using this

PrintWriter out = new PrintWriter(new OutputStreamWriter(

socket.getOutputStream()));

/\* Detailed requirement below\*/

// Step one: send the picture name "Koala.jpg" to the server

System.out.println("[CLIENT] Sending image name: " + imageName);

out.println(imageName);

out.flush(); // ensure imageName is written immediately

// Step two: write the response from the server to a local file "Koala-1.jpg";

while(true){

DataInputStream reader = new DataInputStream(in);

char serverData = reader.readChar();

if(serverData == 'M'){

String charData = reader.readUTF();

System.out.println("[CLIENT] received err message: " + charData);

reader.close();

break;

}

else if(serverData == 'C'){

int byteSize = reader.readInt();

byte[] byteData = reader.readAllBytes();

System.out.println("[CLIENT] received byteSize: "

+ byteSize + " and byteData: " + byteData.length);

String fileExt = "png";

String outputImgName = imageName.replace("." + fileExt, "-1." + fileExt);

try{

String outFilePath = outputDir + outputImgName;

FileOutputStream fos = new FileOutputStream(outFilePath);

fos.write(byteData);

// close file and buffer readers

fos.close();

reader.close();

System.out.println("[CLIENT] success saving server bytes to file: " + outputImgName);

break;

}catch (Exception err){

System.out.println("[CLIENT] client fail to save server bytes to file: " + outputImgName);

err.printStackTrace();

}

}

}

// Step three: close all the input/output streams and socket.

out.close();

in.close();

socket.close();

// Step four: try to read the file "Desert-1.jpg" using any picture viewer.

// If you can view the picture correctly, your download of picture is correct.

// run the client code again and try to send a wrong picture name "Koala-wrong.jpg"

// you will create a Koala-1.jpg again, this time use a normal text editor to open it,

// if you see "Sorry, no such picture", then your program is correct.

} catch (Exception e) {

e.printStackTrace();

}

}

}